



## Complete Summary

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### TITLE

Community-acquired pneumonia: percent of patients admitted to the hospital for community-acquired pneumonia that received influenza immunization in the preceding influenza period (pneumonia cohort).

### SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## Brief Abstract

### DESCRIPTION

This measure assesses the percent of patients admitted to the hospital for community-acquired pneumonia that received influenza immunization in the preceding influenza period.

### RATIONALE

Pneumonia (PN) is a major contributor to illness and mortality in the United States, causing 4 million episodes of illness and nearly one million hospital admissions each year. Pneumonia is the sixth leading cause of death overall and the leading cause of death caused by infection. The total costs of care of PN are estimated at more than \$9.7 billion annually and are dominated by the costs of hospital care. Patients with PN who are hospitalized have 20 times the cost of patients with PN who are treated as outpatients. In-hospital mortality for elderly (greater than 65 years) patients with PN is at least 20 percent. There is a considerable variation in hospital admission rates for PN patients and in the performance of important diagnostic tests and therapeutic processes. This variation suggests the lack of a consistent approach to appropriate and cost efficient management of this illness.

Influenza is a cause of substantial morbidity and mortality in the United States. Influenza vaccine is the most effective way to protect against influenza disease.

### PRIMARY CLINICAL COMPONENT

Community-acquired pneumonia; influenza immunization

### DENOMINATOR DESCRIPTION

Patients meeting criteria for influenza immunization hospitalized for pneumonia (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

#### NUMERATOR DESCRIPTION

The number of patients from the denominator hospitalized for pneumonia who received influenza immunization in the preceding influenza period (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

### Evidence Supporting the Measure

#### PRIMARY MEASURE DOMAIN

Process

#### SECONDARY MEASURE DOMAIN

Not applicable

#### EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

### Evidence Supporting Need for the Measure

#### NEED FOR THE MEASURE

Use of this measure to improve performance  
Wide variation in quality for the performance measured

#### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

### State of Use of the Measure

#### STATE OF USE

Current routine use

#### CURRENT USE

External oversight/Veterans Health Administration  
Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Ambulatory Care

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses  
Physician Assistants  
Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Age greater than 49 years (or younger if clinically indicated [see "Denominator Inclusions/Exclusions" field])

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

See "Rationale" field.

### ASSOCIATION WITH VULNERABLE POPULATIONS

See "Rationale" field.

### BURDEN OF ILLNESS

See "Rationale" field.

### UTILIZATION

See "Rationale" field.

### COSTS

See "Rationale" field.

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Eligible patients from the Pneumonia cohort\*

\*Refer to the original measure documentation for patient cohort description.

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR (INDEX) EVENT

Clinical Condition  
Institutionalization

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Patients meeting criteria for influenza immunization hospitalized for pneumonia\*

\*Criteria for Influenza Immunization: Meets Pneumonia cohort selection criteria\*\* AND seen anywhere in the Veterans Health Administration (VHA) in the 24 months preceding admission AND are any of the following:

- Age greater than 49 by January 1, 2004 (FY05 -- Influenza shortage required vaccine to be prioritized to age greater than 65 years or co-morbidity, including Spinal Cord Injury & Disorder [SCI&D] diagnosis)

OR

- Diagnosis of chronic cardiopulmonary disorder, metabolic disease (including diabetes mellitus), hemoglobinopathy, renal dysfunction or immunosuppression, or will be in 2nd or 3rd trimester pregnancy during influenza season.

\*\*Refer to the original measure documentation for patient cohort description and sampling size strategy. Patients coming in from long term care are eligible for inclusion.

#### Exclusions

Exclude patients that have any one of the following:

- Documented diagnosis of cancer of esophagus, liver, or pancreas
- Enrolled in a VHA or community-based hospice program
- Documented in the medical record a life expectancy less than 6 months

#### NUMERATOR INCLUSIONS/EXCLUSIONS

##### Inclusions

The number of patients from the denominator hospitalized for pneumonia who received influenza immunization in the preceding influenza period\*

\*Note:

Influenza Immunization:

- Documentation in medical record, Current Procedure Terminology (CPT) codes 90658 (split virus), 90659 (whole virus), or 90660 (administered intranasally)

OR

- Historically: If the patient reports influenza immunization was obtained privately, data recorded that immunization was received elsewhere is acceptable. Documentation should include date as much as possible, at a minimum 'fall or autumn' and year.

Influenza Immunization Period: September 1<sup>st</sup> through January 31<sup>st</sup> of the following year.

Patient refusals count against the facility.

#### Exclusions

Unspecified

#### DENOMINATOR TIME WINDOW

Time window is a single point in time

#### NUMERATOR TIME WINDOW

Fixed time period

#### DATA SOURCE

Administrative and medical records data

#### LEVEL OF DETERMINATION OF QUALITY

Individual Case

#### PRE-EXISTING INSTRUMENT USED

Unspecified

#### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a higher score

#### ALLOWANCE FOR PATIENT FACTORS

Unspecified

#### STANDARD OF COMPARISON

Internal time comparison  
Prescriptive standard

#### PRESCRIPTIVE STANDARD

Fiscal year (FY) 2005 targets for influenza immunization prior to admission  
(Pneumonia cohort):

- Facility Floor: 60%
- Meets Target: 79%
- Exceeds Target: 82%

#### EVIDENCE FOR PRESCRIPTIVE STANDARD

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

#### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

### ORIGINAL TITLE

Community-acquired pneumonia (CAP): influenza immunization prior to admission.

### MEASURE COLLECTION

[Fiscal Year \(FY\) 2005: Veterans Health Administration \(VHA\) Performance Measurement System](#)

### MEASURE SET NAME

[Infectious](#)

### MEASURE SUBSET NAME

[Community Acquired Pneumonia](#)

### DEVELOPER

Veterans Health Administration

### ADAPTATION

Measure was not adapted from another source.

### RELEASE DATE

2002 Nov

### REVISION DATE

2005 Mar

### MEASURE STATUS

This is the current release of the measure.

### SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

### MEASURE AVAILABILITY

The individual measure, "Community-Acquired Pneumonia (CAP): Influenza Immunization Prior to Admission," is published in "FY 2005 VHA Performance Measurement System: Technical Manual."

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#### NQMC STATUS

This NQMC summary was completed by ECRI on November 5, 2004. The information was verified by the measure developer on December 10, 2004.

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